

Abstract

A portable single station apparatus is provided including a structure for receiving a quantity of soil to be compressed into a building block, an enclosed system which provides a linear process for receiving, transferring, compressing and ejecting a formed compressed soil building block from the apparatus. The apparatus is comprised of a stationary chamber equipped with an internal adjustable cavity in which the desired block is to be formed. A pair of opposing pressure heads capable of moving toward and away from each other in unison or independently to receive, transfer, compress, and eject the desired building block.

Claims

What is claimed is:

1. An apparatus for forming building blocks from freshly dug soil wherein:

the apparatus comprises a casing having six sides;

the casing includes at least two apertures intended for the introduction and ejection of a quantity of soil;

the casing includes a cavity of adjustable dimensions wherein two opposing faces of said casing are adjustable within the remaining four sides;

the opposing faces within the casing are capable of travel within the entirety of said casing;

the opposing faces within the casing are capable of creating sufficient pressure against one another for the compression of a quantity of soil.
2. A method for the forming of building blocks from freshly dug soil wherein:

the method comprises a self-enclosed linear process of receiving, moving, compressing and ejecting a quantity of soil;

the method comprises the introduction of a quantity of soil within a casing;

the casing includes a cavity of adjustable dimensions wherein two opposing faces of said cavity are formed from opposing faces of a casing with six sides;

the opposing faces of the cavity are adjustable within the remaining four sides of the casing;

a quantity of soil is displaced by means of said cavity in the casing to an area of compression within said casing;

the cavity is then reduced in size to cause the compression of a quantity of soil within;

a quantity of compressed soil is displaced by means of the reduced cavity in the casing to an ejection area within said casing;

the cavity is then increased in size to cause a quantity of compressed soil within to be ejected from the casing.

3. Apparatus of claim 1, wherein the apparatus comprises a trailer that is wheeled, and mobile, and is of a size and nature such that it can be towed on roads, and can be maneuvered about a construction sight.
4. Apparatus of claim 1, wherein the apparatus comprises a casing having seven sides or more, in which two opposing faces travel within said casing for the purpose of receiving, displacing, compressing and ejecting a quantity of soil.
5. Apparatus of claim 1, wherein the apparatus comprises a casing cylindrical in nature through which two opposing faces travel within said casing for the purpose of receiving, displacing, compressing and ejecting a quantity of soil.
6. Apparatus of claim 1, wherein the apparatus comprises a soil hopper.
7. Apparatus of claim 1, wherein a plurality of said cases may be fastened to one another with the purpose of creating a higher volume of compressed soil blocks simultaneously that are uniform in size and design.
8. Apparatus of claim 1, wherein cases of varying dimensions may be fastened to one another with the purpose of creating compressed soil blocks simultaneously that are varied in size and design.
9. Method of claim 2, wherein the opposing faces of the said cavity are moveable by an operable mechanical means.
10. Method of claim 2, wherein opposing faces of said cavity are controlled by an operable command means, which is effective, when operated, to command the opposing faces between stages of operation.